

L10 ANSWER 2 OF 3 MEDLINE
ACCESSION NUMBER: 95333876 MEDLINE
DOCUMENT NUMBER: 95333876
TITLE: **Cholesteryl** ester transfer protein inhibition in hypercholesterolemic hamsters: kinetics of apoprotein changes.
AUTHOR: **Zuckerman S H**; Evans G F
CORPORATE SOURCE: Division of Cardiovascular Research, Lilly Research Labs, Indianapolis, Indiana 46285, USA.
SOURCE: LIPIDS, (1995 Apr) 30 (4) 307-11.
Journal code: L73. ISSN: 0024-4201.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199510

AB Inhibition of **cholesteryl** ester transfer protein (CETP) activity in hypercholesterolemic hamsters results in elevated high-density lipoprotein (HDL) cholesterol, an increase in HDL size, and the appearance

of apolipoprotein E (apo E)-rich, apo A-I-poor particles. The present study has focused on the kinetics of apoprotein redistribution among the HDL particles and the relative increase in HDL-associated apo E and CETP in hypercholesterolemic hamsters, following inhibition of transfer activity using the monoclonal antibody, TP2. A 60% inhibition in CETP activity was observed 24 h after antibody injection and was associated with an increase in HDL cholesterol and HDL size. Increased amounts of

apo E were associated with these HDL particles and remained in this fraction throughout the duration of the study. In contrast, while CETP was also detected on large HDL particles, this distribution shifted back toward

the pretreatment pattern by 14 d. The dynamic changes in apoprotein distribution may represent a compensatory physiologic response following disruption of reverse cholesterol transport.

L10 ANSWER 3 OF 3 MEDLINE
ACCESSION NUMBER: 95105666 MEDLINE
DOCUMENT NUMBER: 95105666
TITLE: Inhibition of **cholesteryl** ester transfer protein in normocholesterolemic and hypercholesterolemic hamsters: effects on HDL subspecies, quantity, and apolipoprotein distribution.
AUTHOR: Evans G F; Bensch W R; Apeltgren L D; Bailey D; Kauffman R F; Bumol T F; **Zuckerman S H**
CORPORATE SOURCE: Division of Cardiovascular Research, Lilly Research Labs, Lilly Corporate Center, Indianapolis, IN 46285..
SOURCE: JOURNAL OF LIPID RESEARCH, (1994 Sep) 35 (9) 1634-45.
Journal code: IX3. ISSN: 0022-2275.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199504

AB The effects of **cholesteryl** ester transfer protein (CETP) inhibition on the serum lipoprotein profile in both normocholesterolemic and hypercholesterolemic hamsters has been determined following subcutaneous injection of 12.5 mg/kg of the CETP neutralizing monoclonal

antibody, TP2. Inhibition of CETP activity was greater than 60% and resulted in a 30-40% increase in high density lipoprotein (HDL) in both normal and hypercholesterolemic animals. These HDL effects were observed 1 day post-injection, were maximal by 4 days, and returned to control values by 14 days. Inhibition of CETP activity resulted in a decrease in both low density lipoprotein (LDL) and very low density lipoprotein (VLDL) cholesterol concomitant with HDL increase, and in hypercholesterolemic animals resulted in increased total serum cholesterol. In addition to the quantitative differences in LDL and HDL, there were significant increases in the size of the HDL, a shift to smaller LDL particles, and changes in apolipoprotein (apo) composition as evaluated by FPLC and Western blot analysis. Large apoA-I-poor and apoE-containing HDL became prevalent in hypercholesterolemic hamsters after CETP inhibition. In addition, the size of the CETP-containing HDL particles increased with inhibition of transfer activity. While these effects were apparent in normocholesterolemic animals, the changes in apolipoprotein distribution and HDL subspecies as detected on native gels were more significant in the hypercholesterolemic animals. The changes in the HDL profile and apolipoprotein distribution after CETP inhibition in hamsters were similar to those reported in CETP-deficient Japanese subjects, suggesting the utility of the hypercholesterolemic hamster as an in vivo model for the understanding of

L2 ANSWER 5 OF 5 MEDLINE
 ACCESSION NUMBER: 89292152 MEDLINE
 DOCUMENT NUMBER: 89292152
 TITLE: Monoclonal antibody inhibition of cholesteryl ester transfer protein activity in the rabbit. Effects on lipoprotein composition and high density lipoprotein cholesteryl ester metabolism.
 AUTHOR: Whitlock M E; Swenson T L; Ramakrishnan R; Leonard M T; Marcel Y L; Milne R W; Tall A R
 CORPORATE SOURCE: Department of Medicine, Columbia University College of Physicians & Surgeons, New York 10032.
 CONTRACT NUMBER: HL-21006 (NHLBI)
 HL-22682 (NHLBI)
 T-07343
 SOURCE: JOURNAL OF CLINICAL INVESTIGATION, (1989 Jul) 84 (1) 129-37.
 Journal code: HS7. ISSN: 0021-9738.
 PUB. COUNTRY: United States
 Journal; Article; (JOURNAL=ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
 ENTRY MONTH: 198910

AB Cholesteryl ester transfer protein (CETP) promotes in vitro transfer of cholesteryl ester (CE) and triglyceride (TG) between lipoproteins. We studied the function of CETP in vivo in rabbit lipoprotein metabolism using a neutralizing monoclonal antibody (MAB, TP1) to CETP. Rabbits were injected with TP1 (n = 8), or irrelevant MAB or saline (control, n = 8), resulting in an initial 71% inhibition of CETP, which fell to 45% after

48

h. HDL CE rose in the inhibited animals, reaching levels that doubled initial and control values at 48 h (P less than 0.001). HDL TG fell reciprocally, but HDL protein did not change, suggesting a CE for TG exchange. VLDL CE/TG decreased. Rabbits were also given [3H]cholesteryl ether HDL (a CE analogue). CETP inhibition delayed the initial clearance of radioactivity from HDL (control 6.8 vs. TP1 4.1 pools/d) and plasma (7.8 vs. 5.2 pools/d). We conclude that CETP plays a quantitatively important role in HDL CE catabolism in the rabbit, promoting the exchange of TG for CE and the clearance of CE from plasma.

L1 ANSWER 18 OF 26 MEDLINE

ACCESSION NUMBER: 89292152 MEDLINE

DOCUMENT NUMBER: 89292152

TITLE: Monoclonal antibody inhibition of cholesteryl ester transfer protein activity in the rabbit. Effects on lipoprotein composition and high density lipoprotein cholesteryl ester metabolism.

AUTHOR: Whitlock M E; Swenson T L; Ramakrishnan R; Leonard M T; Marcel Y L; Milne R W; Tall A R

CORPORATE SOURCE: Department of Medicine, Columbia University College of Physicians & Surgeons, New York 10032.

CONTRACT NUMBER: HL-21006 (NHLBI)
HL-22682 (NHLBI)
T-07343

SOURCE: JOURNAL OF CLINICAL INVESTIGATION, (1989 Jul) 84 (1) 129-37.

Journal code: HS7. ISSN: 0021-9738.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals

ENTRY MONTH: 198910

AB Cholesteryl ester transfer protein (CETP) promotes in vitro transfer of cholesteryl ester (CE) and triglyceride (TG) between lipoproteins. We studied the function of CETP in vivo in rabbit lipoprotein metabolism using a neutralizing monoclonal antibody (MAb, TP1) to CETP. Rabbits were injected with TP1 (n = 8), or irrelevant MAb or saline (control, n = 8), resulting in an initial 71% inhibition of CETP, which fell to 45% after

48

h. HDL CE rose in the inhibited animals, reaching levels that doubled initial and control values at 48 h (P less than 0.001). HDL TG fell reciprocally, but HDL protein did not change, suggesting a CE for TG exchange. VLDL CE/TG decreased. Rabbits were also given [3H]cholesteryl ether HDL (a CE analogue). CETP inhibition delayed the initial clearance of radioactivity from HDL (control 6.8 vs. TP1 4.1 pools/d) and plasma (7.8 vs. 5.2 pools/d). We conclude that CETP plays a quantitatively important role in HDL CE catabolism in the rabbit, promoting the exchange of TG for CE and the clearance of CE from plasma.

L1 ANSWER 21 OF 26 MEDLINE

ACCESSION NUMBER: 88186779 MEDLINE

DOCUMENT NUMBER: 88186779

TITLE: Monoclonal antibodies to the Mr 74,000 cholesteryl ester transfer protein neutralize all of the cholesteryl ester and triglyceride transfer activities in human plasma.

AUTHOR: Hesler C B; Tall A R; Swenson T L; Weech P K; Marcel Y L; Milne R W

CORPORATE SOURCE: Department of Medicine, Columbia University College of Physicians and Surgeons, New York, New York 10032.

CONTRACT NUMBER: HL22682 (NHLBI)
T-07343

SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (1988 Apr 15) 263 (11) 5020-3.

Journal code: HIV. ISSN: 0021-9258.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals; Cancer Journals

ENTRY MONTH: 198807

AB A cholesteryl ester transfer protein (CETP) of apparent Mr 74,000 has recently been purified from human plasma. Three monoclonal neutralizing antibodies to the CETP were obtained by immunizing mice with purified CETP. The antibodies, each recognizing a similar epitope on CETP, caused parallel and complete immunotitration of plasma cholesteryl ester and triglyceride transfer activities but only partial inhibition of phospholipid transfer activity. Monoclonal immunoaffinity chromatography of plasma or its fractions showed complete removal of cholesteryl ester and triglyceride transfer activities but incomplete removal of phospholipid transfer activity. Sodium dodecyl sulfate gel electrophoresis and immunoblotting of the immunoaffinity-retained fractions showed that only the Mr 74,000 protein was immunoreactive. The results suggest that the previously characterized CETP accounts for all of the cholesteryl ester and triglyceride transfer activity in human plasma but only part of